

1 What is claimed is:

2 1. A computer system adapted to play an audio CD, said computer system comprising:

3 a computer subsystem comprising a system CPU, a digital-audio generating circuit, a  
4 digital computer bus coupling said CPU and said digital-audio generator circuit, and a digital  
5 computer bus controller; and

6 a CD audio subsystem comprising an audio device capable of playing an audio CD and  
7 coupled to said digital computer bus controller, an audio amplifier circuit coupled to said audio  
8 device, and an audio interface coupled to said digital computer bus in parallel to said digital  
9 computer bus controller;

10 said audio interface being adapted to generate signals to operate said audio device and  
11 play said audio CD when power is not being supplied to said computer subsystem.

12 2. A system as claimed in claim 1, wherein said audio interface comprises output control  
13 logic selectively coupling said audio interface to said digital computer bus.

14 3. A system as claimed in claim 2, wherein said output control logic generates commands  
15 and/or data to said digital computer bus.

16 4. A system as claimed in claim 2, wherein said output control logic receives commands  
17 and/or data from said audio device.

18 5. A system as claimed in claim 1, wherein said audio interface is isolated from said digital  
19 computer bus when power is being supplied to said computer subsystem.

20 6. A system as claimed in claim 1, wherein said digital computer bus is an IDE bus.

21 7. A system as claimed in claim 1, wherein said audio device is selected from the group  
22 consisting of CD-ROM drive, DVD drive, hard drive, removable IDE media device, and fixed  
23 IDE media device.

1 8. A system as claimed in claim 1, further comprising one more interface switches for  
2 human control of said audio device, said switches electrically coupled to said audio interface and  
3 generating signals to said audio interface and causing said audio interface to generate control  
4 signals for operation of said audio device.

5 9. A system as claimed in claim 1, further comprising a display coupled to said audio  
6 interface for displaying the track number of said CD.

7 10. A system as claimed in claim 8, wherein said interface switches comprise buttons  
8 accessibly mounted on said computer system and coupled to said audio interface so as to permit  
9 human control over said audio device.

10 11. A system as claimed in claim 8, wherein activation of one of said interface switches,  
11 when power is not being supplied to said computer subsystem, generates a signal to said audio  
12 interface thereby activating said audio interface.

13 12. A system as claimed in claim 10, wherein said buttons include functionality selected  
14 from the group of one or more of play, fast-forward, rewind, next track, previous track, pause  
15 and stop.

16 13. A system as claimed in claim 1, wherein a 5 Volt power rail is supplied to said digital  
17 computer bus controller when electrostatic discharge diode protection is employed in said digital  
18 computer bus controller.

19 14. A system as claimed in claim 13, further comprising a power switch adapted to deliver  
20 said 5 Volt power rail to said digital computer bus controller.

21 15. A system as claimed in claim 14, wherein said power switch further turns one or more of  
22 the components selected from the group of: said audio device, said audio interface, and one or  
23 more portions of said CD audio subsystem.

1 16. A system as claimed in claim 1, wherein said audio interface is integrated directly into a  
2 bus bridge, wherein said bus bridge comprises said digital computer bus controller.

3 17. A computer system adapted to play an audio CD, said computer system comprising:  
4 a computer subsystem comprising a system CPU, a digital-audio generating circuit, a  
5 digital computer bus coupling said CPU and said digital-audio generator circuit, and a digital  
6 computer bus controller; and

7 a CD audio subsystem comprising an audio device capable of playing an audio CD and  
8 coupled to said digital computer bus controller, an audio amplifier circuit coupled to said audio  
9 device, and an audio interface coupled to said digital computer bus in parallel to said digital  
10 computer bus controller;

11 said audio interface being adapted to generate signals to operate said audio device and  
12 play said audio CD when power is not being supplied to said CPU.

13 18. A method for playing an audio CD in a computer system, said method comprising:  
14 deenergizing a computer CPU; and  
15 controlling, using an audio interface circuit coupled to a digital computer bus in parallel  
16 to a digital computer bus controller, an audio device and a computer audio amplifier to play an  
17 audio CD without supplying energy to said CPU.

18 19. A method as claimed in claim 18, further comprising providing controlling the operation  
19 of said audio device using at least one interface switch.

20 20. A method as claimed in claim 18, further comprising generating commands and/or data  
21 to said digital computer bus.

22 21. A method as claimed in claim 18, further comprising receiving commands and/or data  
23 from said audio device.



29. A bus controller as claimed in claim 27, wherein said output control logic receives commands and/or data from said audio device.

30. A bus controller as claimed in claim 27, wherein said IC is isolated from said at least one of said data buses when power is being supplied to said CPU.

31. A bus controller as claimed in claim 26, wherein said at least one of said data buses is an IDE bus.

32. A bus controller as claimed in claim 26, wherein said audio device is selected from the group consisting of CD-ROM drive, DVD drive, hard drive, removable IDE media device, and fixed IDE media device.

33. A bus controller as claimed in claim 26, said IC adapted to receive signals from one more interface switches for human control of said audio device, said switches electrically coupled to said IC and generating signals to said IC and causing said IC to generate control signals for operation of said audio device.

34. A bus controller as claimed in claim 26, said IC adapted to transmit to a display coupled to said IC the track number of said CD.

35. A bus controller as claimed in claim 33, wherein said IC is capable of being activated by activation of one of said interface switches, when power is not being supplied to a CPU coupled to said at least one of said data buses.